AMENDMENTS TO THE CLAIMS

This listing of claims replaces all prior versions and listings of the claims in this application.

Please amend claims 1 and 11 as follows:

1. (Currently Amended) A liquid crystal display comprising:

a liquid crystal panel assembly;

a signal controller including

a gamma converter converting input image data into ~~outputting~~ output image data that have gamma characteristic adapted to a gamma 2.2 curve ~~based on input image data with~~ and have a bit number ~~smaller~~ greater than the input ~~output~~ image data,

a color correction unit including color correction coefficients for performing color correction on the image data from the gamma converter, the color correction coefficients determined depending on color represented by the liquid crystal display, and

a dithering and FRC processor reducing a bit number of the image data from the color correction unit by taking upper bits of the image data and controlling position and frequency of the upper bits of the image data;

a voltage generator generating a plurality of gray voltages by dividing a predetermined voltage lower than a supply voltage such that ~~a~~ the predetermined voltage ~~one of the gray voltages~~ gives a luminance of about 80 cd/m^2;

a data driver receiving ~~selecting~~ the gray voltages from the voltage generator, and ~~outputting~~ selecting data voltages among the gray voltages corresponding to the image data

from the signal controller, and outputting the data voltages to the liquid crystal panel assembly; and

an inverter controlling a lamp to emit a luminance higher than 80 cd/m^2 to be provided for the liquid crystal panel assembly.

2. (Original) The liquid crystal display of claim 1, wherein the gamma converter comprises an R data modifier, a G data modifier and a B data modifier for performing the gamma conversion for the input image data for respective red, green and blue colors, and each of the data modifiers maps the input image data into output image data having a gamma characteristic adapted to the gamma 2.2 curve.

3. (Original) The liquid crystal display of claim 2, wherein the data modifiers include a nonvolatile memory.

4. (Original) The liquid crystal display of claim 1, wherein the color correction coefficients are expressed in a 3.times.4 color correction matrix.

5. (Original) The liquid crystal display of claim 4, wherein the color correction unit performs a matrix operation given by:

$$\begin{pmatrix} R_s \\ G_s \\ B_s \end{pmatrix} = M \begin{pmatrix} R_C \\ B_C \\ G_C \\ 1 \end{pmatrix},$$

,where M is the color correction matrix.

6. (Original) The liquid crystal display of claim 5, wherein the color correction matrix is given by:

$$\begin{pmatrix} 0.9535 & 0.0412 & 0.0620 & 2.4168 \\ -0.0717 & 1.1813 & -0.0851 & -14.9909 \\ 0.0456 & -0.1423 & 1.1649 & -16.0530 \end{pmatrix}$$

7. (Original) The liquid crystal display of claim 1, wherein the gamma converter comprises an R data modifier, a G data modifier and a B data modifier for performing the gamma conversion for the input image data for respective red, green and blue colors, the liquid crystal display further comprises a target image data storage storing a map from the input image data into output image data having a gamma characteristic adapted to the gamma 2.2 curve and a controller loading the map stored in the target image data storage into the data modifiers, and the data modifiers select the output image data corresponding to the input image data from the loaded map and outputting the selected output image data.

8. (Currently Amended) The liquid crystal display of claim 76, wherein the data modifiers comprise a volatile memory, and the target image data storage comprises a nonvolatile memory element.

9. (Currently Amended) The liquid crystal display of claim 76, wherein the target image data storage includes a nonvolatile memory in the signal controller and a nonvolatile memory element provided external to the signal controller.

10. (Original) The liquid crystal display of claim 1, wherein the gamma converter obtains the output image data from the input image data by way of a mathematical operation.

11. (Currently Amended) A method of driving a liquid crystal display, the method comprising:

converting gamma characteristic of input image data to be adapted to a gamma 2.2 curve;

performing color correction on the input image data by applying a color correction matrix for reducing ~~color~~ a difference between color represented by the liquid crystal display and color represented by the gamma 2.2 curve;

controlling luminance of a backlight of the liquid crystal display to be larger than about 80 cd/m.sup.2; and

generating a plurality of gray voltages by dividing a predetermined voltage lower than a supply voltage such that ~~a~~ the predetermined voltage ~~one of the gray voltages~~ gives a luminance of about 80 cd/m^2.

12. (Original) The method of claim 11, wherein the gamma characteristic conversion includes a mathematical operation realized on an application specific integrated circuit (ASIC).

13. (Original) The liquid crystal display of claim 11, wherein the color correction includes matrix operation given by:

$$\begin{pmatrix} R_s \\ G_s \\ B_s \end{pmatrix} = M \begin{pmatrix} R_C \\ B_C \\ G_C \\ 1 \end{pmatrix},$$

where M is the 3.times.4 color correction matrix.

14. (Original) The liquid crystal display of claim 13, wherein the color correction matrix is given by:

$$\begin{pmatrix} 0.9535 & 0.0412 & 0.0620 & 2.4168 \\ -0.0717 & 1.1813 & -0.0851 & -14.9909 \\ 0.0456 & -0.1423 & 1.1649 & -16.0530 \end{pmatrix}.$$

15. (New) The liquid crystal display of claim 2, wherein the data modifiers comprise a read only memory.